SEQUENCE LISTING

<110> Desjarlais, John R.

<120> APPARATUS AND METHOD FOR DESIGNING
      PROTEINS AND PROTEIN LIBRARIES

<130> 16380-002001

<140> US 09/877,695
<141> 2001-06-08

<150> US 60/266,711
<151> 2001-02-06

<160> 4

<170> FastSEQ for Windows Version 4.0

<210> 1
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> exemplary motif

<400> 1
Ser Leu Pro Ser Gly Trp Thr Gln Leu Thr Lys Ala Ser Asp Asp Thr
 1   5   10   15
Thr Tyr Tyr Tyr Asn Lys Thr Thr Asp Val Val Thr Asn Thr Arg Pro
            20   25   30
Thr Asp

<210> 2
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> exemplary motif

<221> VARIANT
<222> 1
<223> Xaa = Ser, Asn, or Asp

<221> VARIANT
<222> 8
<223> Xaa = Gln, Lys, Pro, Val, Glu, or Arg

<221> VARIANT
<222> 10
<223> Xaa = Thr or Lys

<221> VARIANT

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<222> 12
<223> Xaa = Ala or Ser

<221> VARIANT
<222> 13
<223> Xaa = Ser or Gly

<221> VARIANT
<222> 15
<223> Xaa = Asp, Asn, Glu, or Ser

<221> VARIANT
<222> 22
<223> Xaa = Lys or Gln

<221> VARIANT
<222> 24
<223> Xaa = Thr or Ser

<221> VARIANT
<222> 25
<223> Xaa = Asp or Asn

<221> VARIANT
<222> 27
<223> Xaa = Val or Lys

<221> VARIANT
<222> 31
<223> Xaa = Arg, Asn, or Gln

<221> VARIANT
<222> 34
<223> Xaa = Asp or Asn

<400> 2
Xaa Leu Pro Ser Gly Trp Thr Xaa Leu Xaa Lys Xaa Xaa Asp Xaa Thr
 1               5                   10              15
Thr Tyr Tyr Tyr Asn Xaa Thr Xaa Xaa Val Xaa Thr Asn Thr Xaa Pro
                20                  25                  30
Thr Xaa


<210> 3
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> exemplary motif

<221> VARIANT
<222> 1
<223> Xaa = Ser, Asn, Asp, or Glu

<221> VARIANT
<222> 8
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<223> Xaa = Gln, Lys, Pro, Val, Glu, Arg, or Asn

<221> VARIANT
<222> 9
<223> Xaa = Leu or Gln

<221> VARIANT
<222> 10
<223> Xaa = Thr or Lys

<221> VARIANT
<222> 12
<223> Xaa = Ala or Ser

<221> VARIANT
<222> 13
<223> Xaa = Ser or Gly

<221> VARIANT
<222> 14, 25, 29, 34
<223> Xaa = Asp or Asn

<221> VARIANT
<222> 15
<223> Xaa = Asp, Asn, Glu, or Ser

<221> VARIANT
<222> 16
<223> Xaa = Thr or Ser

<221> VARIANT
<222> 17
<223> Xaa = Thr or Val

<221> VARIANT
<222> 19
<223> Xaa = Tyr or Phe

<221> VARIANT
<222> 22
<223> Xaa = Lys, Gln, or Glu

<221> VARIANT
<222> 24
<223> Xaa = Thr or Ser

<221> VARIANT
<222> 26
<223> Xaa = Val, Thr, or Gln

<221> VARIANT
<222> 27
<223> Xaa = Val, Lys, or Thr

<221> VARIANT
<222> 28
<223> Xaa = Thr or Gln

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<221> VARIANT
<222> 31
<223> Xaa = Arg, Asn, or Gln

<400> 3
Xaa Leu Pro Ser Gly Trp Thr Xaa Xaa Xaa Lys Xaa Xaa Xaa Xaa Xaa
 1               5                  10                  15
Xaa Tyr Xaa Tyr Asn Xaa Thr Xaa Xaa Xaa Xaa Xaa Xaa Thr Xaa Pro
            20                  25                  30
Thr Xaa


<210> 4
<211> 34
<212> PRT
<213> Artificial Sequence

<220>
<223> exemplary motif

<221> VARIANT
<222> 1
<223> Xaa = Ser, Asn, or Asp

<221> VARIANT
<222> 8
<223> Xaa = Gln or Lys

<221> VARIANT
<222> 10
<223> Xaa = Thr or Lys

<221> VARIANT
<222> 12
<223> Xaa = Ala or Ser

<221> VARIANT
<222> 13
<223> Xaa = Ser or Gly

<221> VARIANT
<222> (14)...(15)
<223> Xaa = Asp or Asn

<221> VARIANT
<222> 17
<223> Xaa = Thr or Val

<221> VARIANT
<222> 19
<223> Xaa = Tyr or Phe

<221> VARIANT
<222> 22
<223> Xaa = Lys or Gln
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<221> VARIANT
<222> 24
<223> Xaa = Thr or Ser

<221> VARIANT
<222> 25
<223> Xaa = Asp or Asn

<221> VARIANT
<222> 27
<223> Xaa = Val or Lys

<221> VARIANT
<222> 28
<223> Xaa = Thr or Gln

<221> VARIANT
<222> 31
<223> Xaa = Arg or Asn

<221> VARIANT
<222> 34
<223> Xaa = Asp or Asn

<400> 4
Xaa Leu Pro Ser Gly Trp Thr Xaa Leu Xaa Lys Xaa Xaa Xaa Xaa Thr
 1               5                   10                  15
Xaa Tyr Xaa Tyr Asn Xaa Thr Xaa Xaa Val Xaa Xaa Asn Thr Xaa Pro
            20                   25                  30
Thr Xaa
```